

AMENDMENTS TO THE CLAIMS

1-37. (Canceled)

38. (Currently Amended) A storage-based broadcasting system which stores a plurality of contents to provide a service and an executable browser used for browsing the service~~a user interface to a user~~, said the system comprising:

transmission means for transmitting the plurality of contents; and

receiving means for receiving the plurality of contents from said transmission means via a transmission path, and ~~activating the user interface~~executing the browser, wherein:

~~each of the plurality of contents includes a content body and a content header for defining each of the plurality of contents, respectively;~~

~~the content body is one of a service content body for providing the service and a browser content body for providing the user interface with the service;~~

~~the content header attached to the browser content body contains a content flag which distinguishes the browser content body from the service content body;~~

said transmitting means comprises,

first storage means for storing a service content body and a browser content body,
the service content body being for providing the service, and the browser content body being
generated from the browser in the same format as the service content body~~a plurality of contents~~
~~bodies,~~

a content body pitcher for outputting ~~each of the plurality of content bodies~~the
service content body and the browser content body stored in said first storage means,

content assembler means for assembling ~~a content~~contents in the same format by
adding ~~the respective~~a content header for defining each of the contents to ~~each of the~~
~~plurality of content bodies~~the service content body and the browser content body
outputted from said content body pitcher,

multiplexer means for multiplexing the content assembled by said content
assembler means, and

transmitter means for modulating the ~~content~~contents multiplexed by said multiplexer means and outputting the modulated contents, which contain the service content body and the browser content body, to said receiving means,~~content,~~

wherein said receiving means comprises, ~~browser content determination means for determining a content, including the browser content body, among the plurality of received contents based on the content header included in each of the plurality of received contents.~~

de-multiplexing means for temporarily holding the received contents and extracting information contained in the content header of the received contents,

second storage means for storing the contents,

control means for updating the contents having been stored in said second storage means with the contents held in said de-multiplexing means when it is determined, based on the information extracted from the content header, that a content of the same kind and version as the contents held in said de-multiplexing means is not stored in said second storage means,

wherein said control means is further for selecting a content, including the browser content body, from among the contents stored in said second storage means, based on the content header contained in each of the contents being stored in said second storage means, and for executing the browser content body included in the selected content.

39. **(Currently Amended)** The storage-based broadcasting system in accordance with claim 38, wherein:

said transmission means further comprises service property information transmitting means for transmitting service property information for indicating properties of the service;

said receiving means is further for receiving the transmitted service property information;
and

said ~~browser content determination~~control means is further for determining a content, including the browser content body, among the plurality of received contents based on the service property information in addition to the content header.

40. **(Currently Amended)** The storage-based broadcasting system in accordance with claim 39, wherein:

said transmission means further comprises electronic signature means for placing an electronic signature on the content including the browser content body;

said service property transmitting means is further for transmitting a public key of the electronic signature as being included in the service property information;

said receiving means further comprises signature authentication means for authenticating the electronic signature by using the public key included in the received service property information; and

said ~~browser content determination~~control means is further for determining the content, including the browser content body, among the plurality of received contents through authentication of the electronic signature.

41. **(Previously Presented)** The storage-based broadcasting system in accordance with claim 40, wherein the key used for authentication of the electronic signature is unique to the service.

42. **(Currently Amended)** The storage-based broadcasting system in accordance with claim 39, wherein:

said content pitcher ~~means~~ further comprises content ID space management means for sending information for defining a part of an ID space of the content; and

said receiving means further comprises designation means for designating the content, including the browser content body, based on a content ID included in the defined part of the ID space.

43. **(Currently Amended)** A content transmission method performed in a storage-based broadcasting system which stores a plurality of contents to provide a service and ~~a user interface to a user~~an executable browser used for browsing the service, ~~said the~~ method comprising:

transmitting the plurality of contents;

receiving the plurality of contents via a transmission path; and
~~activating the user interface~~executing the browser, wherein:
~~each of the plurality of contents includes a content body and a content header for defining~~
~~each of the plurality of contents, respectively;~~
~~the content body is one of a service content body for providing the service and a browser~~
~~content body for providing the user interface with the service;~~
~~the content header attached to the browser content body contains a content flag which~~
~~distinguishes the browser content body from the service content body;~~
 said transmitting of the plurality of contents comprises,
 ~~storing a plurality of contents bodies~~a service content body and a browser content
body, the service content body being for providing the service, and the browser content body
being generated from the browser in the same format as the service content body,
 ~~outputting each of the plurality of content bodies~~the stored service content body
and the browser content body, and
 ~~assembling a content~~contents in the same format by adding the respectivea content
header for defining each of the contents to each of the plurality of content bodiesthe
outputted service content body and the browser content body,
 multiplexing the assembled content~~assembled in said assembling,~~
 modulating the multiplexed content~~multiplexed in said multiplexing, and~~
 ~~outputting~~transmitting the modulated content,contents which contain the service
content body and the browser content body;
 wherein said receiving of the plurality of content comprises, ~~determining a content,~~
~~including the browser content body, among the plurality of received contents based on the~~
~~content header included in each of the plurality of received contents.~~
 ~~temporarily-holding the received contents,~~
 ~~extracting information contained in the content header of the received contents,~~
 ~~storing the contents,~~
 ~~updating the stored contents with the contents temporarily-held when it is~~

determined, based on the information extracted from the content header, that a content of the same kind and version as the contents temporarily-held is not stored,

selecting a content, including the browser content body, from among the contents stored, based on the content header contained in each of the contents having been stored, and
executing the browser content body included in the selected content.

44. **(Previously Presented)** The content transmission method in accordance with claim 43, wherein:

said transmitting of the plurality of contents further comprises transmitting service property information for indicating properties of the service; and

said receiving of the plurality of contents comprises

receiving the transmitted service property information, and

determining a content, including the browser content body, among the plurality of received contents based on the service property information in addition to the content header.

45. **(Previously Presented)** The content transmission method in accordance with claim 44, wherein:

said transmitting of the plurality of contents further comprises placing an electronic signature on the content including the browser content body;

said transmitting of the service property information further comprises transmitting a public key of the electronic signature as being included in the service property information; and

said receiving of the plurality of content further comprises

authenticating the electronic signature by using the public key included in the received service property information, and

determining the content, including the browser content body, among the plurality of received contents through authentication of the electronic signature.

46. **(Previously Presented)** The content transmission method in accordance with claim 45, wherein the key used for authentication of the electronic signature is unique to the service.

47. **(Previously Presented)** The storage-based broadcasting system in accordance with claim 44, wherein:

said transmitting of the plurality of contents further comprises sending information for defining a part of an ID space of the content; and

said receiving of the plurality of contents further comprises designating the content, including the browser content body, based on a content ID included in the defined part of the ID space.

48. **(Currently Amended)** A storage-based broadcasting system operable to store a plurality of contents to provide a service and ~~a user interface to a user~~an executable browser used for browsing the service, said ~~the~~ system comprising:

a transmission unit operable to transmit the plurality of contents; and

a receiving unit operable to receive the plurality of contents from the transmission unit via a transmission path, and ~~activate the user interface~~execute the browser, wherein:

~~each of the plurality of contents includes a content body and a content header for defining each of the plurality of contents, respectively;~~

~~the content body is one of a service content body for providing the service and a browser content body for providing the user interface with the service;~~

~~the content header attached to the browser content body contains a content header which distinguishes the browser content body from the service content body;~~

said transmitting unit comprises,

a first storage unit operable to store ~~a plurality of contents bodies~~a service content body and a browser content body, the service content body being for providing the service, and the browser content body being generated from the browser in the same format as the service content body,

a content body pitcher unit operable to output ~~each of the plurality of content bodies~~the service content body and the browser content body stored in said first storage unit, and

a content assembler operable to assemble ~~a content~~contents in the same format by adding ~~the respective~~a content header for defining each of the contents to ~~each of the plurality of content bodies~~the service content body and the browser content body outputted from said content body pitcher unit,

a multiplexer operable to multiplex the ~~content~~contents assembled by said content assembler, and

a transmitter operable to modulate the ~~content~~contents multiplexed by said multiplexer and output the modulated ~~content~~contents, which contain the service content body and the browser content body, to said receiving unit,

wherein said receiving unit comprises, ~~a browser content determination unit operable to determine a content, including the browser content body, among the plurality of received contents based on the content header included in each of the plurality of received contents.~~

a de-multiplexer operable to temporarily hold the received contents and extract information contained in the content header of the received contents,

a second storage unit operable to store the contents,

a controller operable to update the contents having been stored in said second storage unit with the contents held in said de-multiplexer when it is determined, based on the information extracted from the content header, that a content of the same kind and version as the contents held in the de-multiplexer is not stored in the second storage means,

wherein the controller is further operable to select a content, including the browser content body, from among the contents stored in said second storage unit, based on the content header contained in each of the contents being stored in said second storage unit, and execute the browser content included in the selected content.

49. **(Currently Amended)** The storage-based broadcasting system in accordance with claim

48, wherein:

said transmission unit further comprises a service property information transmitting unit operable to transmit service property information for indicating properties of the service;

said receiving unit is operable to receive the transmitted service property information; and

said ~~browser content determination unit~~controller is operable to determine a content, including the browser content body, among the plurality of received contents based on the service property information in addition to the content header.

50. **(Currently Amended)** The storage-based broadcasting system in accordance with claim 49, wherein:

said transmission unit further comprises a signature generator unit operable to place an electronic signature on the content including the browser content body;

said service property transmitting unit is further operable to transmit a public key of the electronic signature as being included in the service property information;

said receiving unit further comprises a signature authentication unit operable to authenticate the electronic signature by using the public key included in the received service property information; and

said ~~browser content determination unit~~controller is operable to determine the content, including the browser content body, among the plurality of received contents through authentication of the electronic signature.

51. **(Previously Presented)** The storage-based broadcasting system in accordance with claim 50, wherein the key used for authentication of the electronic signature is unique to the service.

52. **(Previously Presented)** The storage-based broadcasting system in accordance with claim 49, wherein

the content pitcher unit further comprises a content ID space management unit operable to send information for defining a part of an ID space of the content, and

the receiving unit further comprises a designator operable to designate the content, including the browser content body, based on a content ID included in the defined part of the ID space.

53. **(Currently Amended)** The storage-based broadcasting system in accordance with claim 48, wherein ~~said~~ the storage-based broadcasting system further comprises a delivery unit operable to receive the content including the browser content body transmitted by said transmission unit, and transmit the transmitted content including the browser to said receiving unit.

54. **(Previously Presented)** The storage-based broadcasting system in accordance with claim 53, wherein:

said transmission unit is operable to transmit the content as a digital bit stream to said delivery unit; and

said delivery unit is operable to transmit the transmitted content as a digital bit stream to the receiving unit.